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instructional materials

Information Technology and Communication Services
College of Agricultural, Consumer and Environmental Sciences



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F	or orders \$4.99 and under add	\$2.50	
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F	or orders from \$20 to \$99.99 add	\$6.50	
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F	or each additional \$100 add another	\$3.50	
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Orders may be placed by calling Information Technology and Communication Services. Please have an authorized purchase order number and Federal Employer's Identification or Social Security number before placing your order by telephone. For orders or information call 800/345-6087 or FAX 217/333-3917. E-mail orders may be directed to ACESPUBS@uiuc.edu.

Payment

Payment is due upon receipt of invoice. Checks must be drawn upon a U.S. bank and payable in U.S. currency. Payment by MasterCard or Visa is accepted. Prices are subject to change without notice. University policy states that accounts that are unpaid after 30 days will be charged a 1% or \$1.00 minimum monthly charge on the amount that is 30 days or more past due. Charges over 120 days old will be sent to a collection agency by the Accounts Receivable Section of the Accounting Division of the University.

Returns for Credit

Our return policy allows return of publications except Agriscience Kits, Videotapes, Computer Software, Photo CDs, and Digital Slide Sets. Credit will be issued ONLY if material is listed in the current catalog and is in original condition. Material must be returned prepaid within 90 days of the date of purchase. The invoice number on which the materials were billed must be included with the return. Returned items must be in original condition or they will be sent back to purchaser without credit.

Foreign Orders

A statement of total cost of material ordered and shipping charges will be submitted before shipment. Orders must be prepaid, including surface or airmail charges. Payment must be made to the **University of Illinois** either in the form of U.S. currency money order, or by check drawn on a U.S. bank in U.S. currency. Payment by MasterCard or Visa is accepted.

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Description of Instructional Materials

Units

Units cover a particular subject and are designed for use as a text by every student in the class. They are 8 1/2" by 11" in size and punched for a three-ring binder.

Filmstrips

Filmstrips are single-frame, 35mm color films used on a standard filmstrip projector. Some text material is generally shown on each frame so that a separate script may be unnecessary. However, most filmstrips are accompanied by a study guide or script that is included in the filmstrip price. Cassette tapes narrating study guide text are listed when available for the filmstrips.

Slide Sets

Standard 2" x 2" color slides usually include material identical to the filmstrip of the same title and number. Slide sets may have an accompanying study guide which is included in the slide set price. Cassette tapes narrating study guide text are listed for slide sets when available.

Transparencies

These are 8 1/2" \times 11" instructional illustrations printed on clear plastic for overhead projection. Each transparency is accompanied either by a printed paper copy, usually with some text on the back, or by a study guide with text. Some transparencies have cassette tapes for narration. Each set is packaged in a manila pocket folder with the title of the set stamped on the tab.

Study Guides

Study guides are 8 1/2" x 11" printed booklets that may accompany filmstrips, slide sets, transparency sets or photo CDs of the same title and number. They include reduced-size black and white picture frames adjacent to the narration or script for the frame. Study guides are used for narration, to review the presentation, and for independent study. They may be purchased separately for \$2.00, but are included in the price of filmstrips, slide sets, transparency sets, and photo CDs, and are listed with accompanying visuals when available.

Cassette Tapes

Cassette tapes fit a standard cassette tape player and are used to narrate filmstrips, slide sets, or transparency sets of the same title and number. The information in the cassette is the same as contained in the study guide or script. The * shown in catalog descriptions indicates that a cassette tape of the study guide is available at a cost of \$3.85.

Flash Cards

Full-color photographs presented on glossy-finished card stock include descriptions on the back. These $5" \times 7"$ cards are suitable for individual or classroom use.

Color Photo Sheets and Booklets

Color photo sheets, 8 1/2" \times 11", consist of detailed close-up pictures on one side and concise descriptions on the reverse side. Crop Plants, Diseases and Pests of Horticulture Plants, and Diseases and Pests of Field Crop Plants are booklets with photo sheets, 8 1/2" \times 11", spiral-bound.

Diseases of Soybeans and Corn, Insect Pest Identification of Corn, Soybeans, and Alfalfa, and Vegetative Identification of Common Row Crop Weeds are pocket-sized spiral-bound pocketbooks. These informative color pocketbooks are useful for identification purposes in the classroom or in the field.

Agriscience Kits

Agriscience teaching kits are designed for use by teachers who teach science to students K through 8. High school agriculture teachers find these kits valuable for teaching Agriscience units to their secondary classes. These self-contained easy-to-use kits each contain an activity guide which provides both teacher and student with useful information, step-by-step directions for activities and exercises, and numerous worksheets. All the materials for conducting the activities and exercises are packaged in each kit.

Computer Software

Computer software programs are available for IBM and IBM-compatible computers on 3.5-inch disks. Operating instructions are provided with each software program.

Photo CDs

Photo CDs are Kodak Photo CDs which may contain up to 100 images each. Kodak Photo CD access software or some other graphics program will be required to view the images on these disks (viewing software is not included on the photo CDs sold by ITCS Instructional Materials).

IBM/IBM-compatible computer system requirements

Recommended configuration

- MICROSOFT WINDOWS 3.1, WINDOWS 95 (or later), or WINDOWS NT software
- 120 MHz PENTIUM or better
- 32 MB RAM
- 75 MB free disk space
- SVGA video card and monitor

MACINTOSH computer system requirements

Minimum configuration

- POWER MACINTOSH or POWER PC based
- MACINTOSH OS-compatible
- 24+ MB RAM
- 8+ MB free disk space
- 8-bit color card; compatible monitor

Digital Slide Sets

Digital slide sets are distributed on two different media—3.5-inch floppy diskettes (DS) and CD-ROM (MDS). System requirements are an IBM/IBM-compatible computer and Windows 3.x or better.

DS—these products are a single presentation as compressed files on floppy diskettes. Each program has a runtime slide show player, help files, the presentation, and a decompression and install utility. Includes printed documentation and suggestions for use. A single presentation may occupy up to 10 MB or more of hard disk space.

MDS—these products contain multiple uncompressed DS presentations. The advantages of digital slide sets on CD-ROM include 1) the presentations can run directly from the CD-ROM, eliminating the troublesome step of transferring from diskettes to a computer hard drive, 2) because the presentations run from the CD-ROM, they won't occupy hard drive space, 3) there is no threat of overwriting the information on the CD-ROM, and 4) the CD-ROMs are portable, so they can be reviewed at home in preparation for upcoming lessons in the classroom. MDS CD-ROMs are organized into folders with one presentation each. Each folder has a text file with information about how the presentation is organized and contains some guides to using the presentation.

Videotapes

Videotapes are VHS format; available in NTSC, PAL, and SECAM.

Agribusiness Management

Units

Agricultural Business Procedures,			
32p			
U6004\$3.20			
Agricultural Credit Instruments, 12p U6007 \$1.20			
What Factors Affect Prices of			
Agricultural Products?, 12p			
U6009\$1.20			
Inventory Management & Control,			
8p			
U6010\$.80			
000 TO \$.00			
Common Ways of Organizing a Business, 8p			
U6014\$.80			
Mathematical Applications in			
Agriculture, 24p			
U6015\$2.40			
Using Incurance in the Form			
Using Insurance in the Farm			
Business, 12p			
U6017 \$1.20			



Agricultural Facts and Resources, 28pMeasurements and conversions, commodity weights and measures, production charts and equations, and financial equations assist agricultural production and agribusiness problem solving.

U6036	\$2.80

Transparencies, Filmstrip, Slide Set

Mathematical Applications in
Agriculture
F330 Filmstrip, 40 fr \$ 6.00
S330 Slide set, 40 fr \$10.00
T330 Transparencies, 24 fr \$ 7.40

Human Relations & Salesmanship

Units

Applying for a Job , 12p U6001b \$1.20		
Human Relations in Agricultural		
Business , 12p U6003 \$1.20		
International Agriculture Exchange & Work Opportunities, 16p		
U6021\$1.60		
Marketing Products and Merchandise in Agricultural Businesses, 32p		
U6026 \$3.20		
The Relationship of Sales in Agriculture, 12p		
U6030 \$1.20		
Careers in Agricultural Sales, 16p U6031\$1.60		
Agricultural Sales Communications,		
8p U6032\$.80		
Steps in Preparing for an		
Agricultural Sales Call , 12p U6033 \$ 1.20		
Conducting an Agricultural Sales Call, 20p		
U6034\$2.00		

Computers & Software

Units



Introduction to Computers in	
Agriculture, 12p	
U6023	\$1.20

Using Computers in Agriculture, 32p U6029 \$3.20
Spreadsheet Applications for
Agricultural Business, 24p
U6035\$2.40



Financial Summary and Statement		
Program		
CP410	\$20.00	
Financial Calculator		

i ilianciai calcalatoi	
CP415	\$15.00
· ·	
Cash Flow Statement for Pro-	duction

Agr	iculture	
	CP416	\$15.00

Amortization Calculator Calculates and displays a repayment schedule for a loan.

	\$15.00

Livestock Feeder Calculator
Designed to prepare budgets for feeder pig and feeder cattle finishing. Production and marketing information is needed when entering data while preparing a budget. Performs the various computations when budgeting for livestock feeder finishing and will print a copy.

CP420		\$15.00

Crop Production Budgets
Designed to assist students and instructors when making crop production decisions. Corn, soybean, and wheat budgets are presented with user input options to vary numerous production factors. Input costs that appear when the program is first started can be substituted with more current information.

CP421\$15.0



Agriculture Conversions

Designed to calculate various measurement conversions and financial analyses commonly found in agricultural business and production. This program may be used in conjunction with the subject-matter unit U6036, Agricultural Facts and Resources. CP422 will operate on a PC in DOS or Windows and from a hard drive or the program diskette.

	CP422		\$20.00
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Livestock and Dairy Cattle Contest Calculator

Designed to assist in tabulating livestock and dairy cattle contest scores and rankings. This program can total ring scores, rank individuals, select top three individual scores per team, and total team scores, and print results.

CP423	***************************************	\$25.00
6 3 CI 452		\$25.00

NOTE: IBM/IBM compatible computer programs are on 3.5" disks.

Credit and Financial Management

Units

Using Credit to Increase Farm Earnings, 12p U2024b	\$1.20
Determining Credit Needs on Farm, 12p	the
U2025b	\$1.20
Planning for Repayment of Loa	ins,
U2026b	\$2.00
Sources of Farm Credit, 12p U2027b	\$1.20
Factors Involved in the Borrow	ing
Process , 8p U2028b	. \$.80
Using Farm Real Estate Loans.	8p

U2033a \$.80

Farm Planning

Unit

Planning a Profitable Farm	Business,
4p	
U2001c	\$.40

Form Management Manual 24

Other Materials

U310\$2.40
Partial Budget Forms, set of 4 Z372 \$.40
Partial Budgets & Break-Even Problems, 8p Q372\$.80
Key for Q372, 4p K372 \$.40

Marketing and Business Management

Units

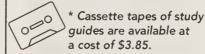
Principles That Affect Production	١,
24p U2040a \$2	2.40
Fundamentals of Marketing Agricultural Products, 8p U2046\$.80

Agricultural Business Management-

Transparencies

Marketing The Easy Way! Hedging and options methods of trading are included.





Digital Slide Set



Marketing The Easy Way!

This digital slide set contains the same information as the transparency set T350 of the same title. DS340 illustrates various aspects of commodity marketing. Hedging and options methods of trading are covered utilizing graphical images.

	DS340	47 fr.	•••••	\$20.0
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Records

Unit

Standards for Measures of Efficiency for 1999, 8p

This item, based on FBFM records from the previous year, provides standards for use in analyzing and evaluating student records. It is revised each year.

U2020.....\$.80

Ag Mechanics Lab

Units

Safety in the Shop , 32p U3022a \$3.20		
Student Safety Tests , 32p Q3022\$3.20		
Teachers' Key for Q3022 K3022\$3.20		
Micrometers & Related Measuring		
Tools , 8p U3023 \$.80		
Planning a Woodworking Project,		
20p U3051a\$2.00		
000014		

Transparencies, Study Guide

Shop Tool Identification
171 shop tools are divided into 6
categories: carpentry and
woodworking, engine and machinery,
metalworking, various construction
skills, hand power, and horticulture.

T457 24 fr., w/quide \$18.95

Other Materials



Charts on Safety Rules 27 laminated 8 1/2" x 11" charts constantly remind students of the importance of working safely. Heavy black print is highly visible on bright yellow paper. Special lists of safety rules should be posted in every work

Z490.1 General Shop \$1.10

Z490.2 Everyone Must Wear Safety Glasses at all Times in Shop \$1.10 Z490.3 Think Safety to be Safe \$1.10 Z490.4 No Horseplay or Running in Shop \$1.10 Z490.5 Tools Must be Returned &
Shop Cleaned After Each Class . \$1.10 Z490.20 Hand Tool
Z490.23 Soldering and Sheet Metal Work
Saw \$1.10 Z490.34 Band Saw \$1.10 Z490.35 Power Metal-Cutting Saw \$1.10 Z490.40 Jointer \$1.10
Z490.41 Router and Planer \$1.10 Z490.42 Sander \$1.10 Z490.43 Stationary Grinder \$1.10 Z490.44 Portable Grinder \$1.10 Z490.45 Drill Press \$1.10 Z490.46 Portable Drill \$1.10 Z490.60 Shielded Metal Arc Welder \$1.10
#########################

MZ490 Set of 27 Charts on Safety Rules\$23.75

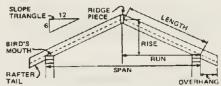
Carpentry & Construction

Units

Concrete	Improvements for Farm &
Home, 28p	
U3007a	\$2.80

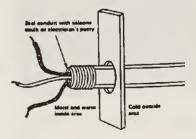
Using the Carpenter's Square, 20p U3009a\$2.00





Recommended Practices for Building with Concrete Masonry, 16p U3034 \$1.60 Plywood Applications in Farm Construction, 28p U3042.....\$2.80 Metal Roofing & Siding for Farm Structures, 16p U3045 \$1.60 Paints and Painting, 20p U3053 \$2.00 Lumber: Grading, Selecting, Buying, Using, and Storing, 20p U3055......\$2.00 Designing, Installing, Maintaining and Repairing Plumbing Systems, U3056......\$4.00 Collecting and Using Solar Energy, U3060.....\$3.20

Filmstrip, Slide Set, Study Guide, Cassette Tape



Electrical Wiring in Livestock Confinement Buildings

This program describes electrical wiring materials and techniques to be used in agricultural buildings.

F406 Filmstrip,	70 fr., w/guide*
	\$11.40
S406 Slide set, 7	70 fr., w/guide*
	\$18.4

area.

Rafter Marking

Transparencies, Study Guides, Cassette Tapes

Carpentry Transparencies
Students planning a construction
project may study these to learn to
use the steel square.

T422 31 fr., w/guide*	\$10.40
Steel Square	
T423 25 fr	\$7.70

Lumber-Buying, Grading, Selecting, Storing and Using

Use with the unit U3055 with the same title. Features illustrations, examples, and tables about lumber.

T426 50 fr., w/guide*	\$35.85
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Planning a Woodworking Project Includes illustrations, tables, forms, and plans. Designed for the beginning student.

T427 34 fr., w/guide*	\$11.30)
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Electricity

Units, Exercises, Teacher's Keys



U3003c \$4.80
Electrical Hazards in Home, Farm, and Business, 40p
U3012a \$4.00
Electrical Wiring Procedures, 28p
U3016a\$2.80

Planning for Electrical Wiring, 48p

Electrical Wiring Exercises, 28p
Z3016b\$2.80

Using Three-Phase Electrical Po	wer
on the Farm, 8p	
U3038	\$.80

Electrical Controls in Agriculture,	
20p	
U3057 \$2.	00

Electrical Controls	Exercises,	52p	
73057a		¢5	20

Instructor's Key to Z3057a,	16p
K3057a	\$1.60

Selecting Electric Motors for Use in Agriculture, 24p U3058......\$2.40

Installing and Caring for Elect	ric
Motors in Agriculture, 28p	
U3059	\$2.80

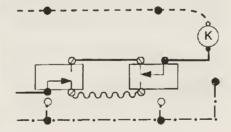
Selecting Equipment for Elec	trical
Installations, 24p	
U3061	\$2.40

Filmstrips, Slide Sets, Study Guides, Cassette Tapes

Basic Electrical Wiring and Diagramming

Wiring plans, graphic and schematic electrical symbols, and wiring diagrams are illustrated and explained.

F401.1 Filmstrip, 60 fr., w/guide*
\$24.00
S401.1 Slide set, 60 fr., w/guide*
\$36.00



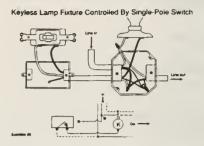
Diagramming Electrical Wiring Circuits

Lighting circuits containing singlepole, 3-way, and 4-way switches in various configurations are diagrammed.

F401.2 Filmstrip, 40 fr., w/guide*
\$17.00
S401.2 Slide set, 40 fr., w/guide*
\$25.00

Identification of Electrical Wiring Items F404c Filmstrip, 66 fr. \$26.10

Transparencies, Study Guide



Wiring Exercises

The illustrations and diagrams for 48 electrical wiring exercises are clearly drawn and easy to follow. The 32-page study guide discusses and explains each transparency in detail.

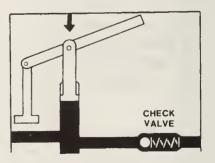
T400a 55 fr., w/guide..... \$39.10

Machinery

Units

Introduction to Combines, 12 U3047	
Combines-Selecting and Service 16p	vicing,
U3048	. \$1.60
Combines-Reducing Harvesti Losses, 28p	ng
U3049	\$2.80

Transparencies, Study Guide



Basic Principles of Hydraulics Emphasis is on hydraulic principles, basic formulas, pistons, pumps, valves, and design functions of hydraulic systems.

T440 59 fr.	, w/guide		\$41.70
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Small Engines

Units

Small Engines–Principles of Operation, Trouble-Shooting & Tune-Up, 16p U3014\$1.60
Small Engines-Repair and Overhaul, 20p U3019 \$2.00
The Two-Cycle Engine, 20p U3020\$2.00

Filmstrips, Slide Sets, Study Guides, Cassette Tapes



Small Engine Parts and Functions
Series

Series
Fuel-Air Induction F486-1 Filmstrip, 80 fr., w/guide* \$31.00 S486-1 Slide set, 80 fr., w/guide* \$47.00
Compression F486-2 Filmstrip, 80 fr., w/guide* \$31.00 S486-2 Slide set, 80 fr., w/guide* \$47.00
Ignition F486-3 Filmstrip, 60 fr., w/guide* \$24.00 S486-3 Slide set, 60 fr., w/guide* \$36.00
Secondary Functions and Special Tools F486-4 Filmstrip, 80 fr., w/guide* \$31.00 S486-4 Slide set, 80 fr., w/guide* \$47.00

Small Engine Series MF486 4 Filmstrips, w/guides* \$93.60
MS486 4 Slide sets, w/guides* \$141.60

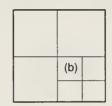
Transparencies

Small Gas Engines
Basic principles of small engine
operation, repair and overhaul, and
maintenance are included.

T489 50 fr.....\$33.85

Surveying

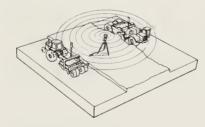
Units, Test Questions, Teacher's Key



N.W. 1/4 of S.E. 1/4 40 acres

Land Surveys and Descriptions, 8p

U2042\$.80
Test Questions Q2042 pkg. of 10\$1	1.50
Teacher's Key for Q2042 K2042\$.65



Surveyir	ng in Agriculture, 44p	
U3010b		\$4.40

Filmstrips, Slide Sets

Surveying Series

Presents information in photographs, illustrations, and diagrams.

Using the Steel Tape in Surve	ying
F436a Filmstrip, 36 fr	\$13.60
S436a Slide set. 36 fr	\$20.80

Recording Field Notes for Surveying F437a Filmstrip, 41 fr
Using the Level in Farm Surveying F438a Filmstrip, 79 fr
Staking Out a Building Site F439a Filmstrip, 33 fr
Surveying Series MF436a 4 Filmstrips

Other Materials

Field Book for Surveying Notes	
Z436\$	1.50

Tractors & Large Engines

Transparencies, Study Guide

Tractor Safety

Safety rules and procedures presented apply to all sizes of tractors. The 24-page study guide includes information about each transparency.

T485a 5	50 fr.,	w/guide	\$35.85
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Welding & Metalwork

Units

Oxyacetylene Welding and Cutting, 28p		
U3001a	\$2.80	
Shielded Metal-Arc Welding, 4	20	
U3004a	\$4.80	
Soldering for Home, Farm and	Shop	
Applications, 24p	٠٠٦	
	¢0.40	
U3027	\$2.40	
Tungsten Inert Gas (TIG) Weld	ing,	
32p		
113036	\$3.20	

Metal Inert Gas (MIG) Welding, 44p U3037\$4.40

Filmstrips

Arc Welding Filmstrip Series Available only as a complete set.

Process, Equipment and Safety F450 Filmstrip, 45 fr.

Flat Position Welding F451 Filmstrip, 63 fr.

Vertical, Horizontal, and Overhead Position F452 Filmstrip, 34 fr.

Arc Welding Series
MF450 Set of above 3 Filmstrips
\$34.00

Miscellaneous

Filmstrips, Slide Sets, Study Guides, Cassette Tapes

Groundwater Series

These discuss where groundwater occurs, how it is discovered and stored, how it moves below the surface, how reserves are replenished, and how groundwater becomes contaminated.

Gr	01	und	wa	ter	Res	our	ces
						_	

F490 Filmstrip, 52 fr., w/guide*
\$13.90

Groundwater Protection

F491 Filmstrip, 62 fr., w/guide*
\$10.20
S491 Slide set, 62 fr., w/guide*
\$16.40





* Cassette tapes of study guides are available at a cost of \$3.85.

Agriscience

Curriculum Materials

Biological Science Applications in Agriculture-Plant Science (BSAA-I) encompasses plant growth, reproduction, and processing and relates them to basic biological concepts. Animal Science (BSAA-II) is designed to reinforce and extend students' understanding of science by associating scientific principles and concepts with relevant applications in agriculture. These curricula, developed by Agricultural Education faculty at the University of Illinois at Urbana-Champaign, were the first in a series of new agriculture science courses created for the secondary schools.

Physical Science Applications in Agriculture (PSAA-I and PSAA-II) covers production, environment, structures, and power and relates them to basic concepts in chemistry and physics. These hands-on, laboratory science curricula give both agriculture and science teachers a new tool for improving course content by connecting the science of agriculture to corresponding agriculture practices.

PSAA-I Physical Science Applications in Agriculture I, 30 lab exercises, 332p in 3-ring binder \$30.00

PSAA-II Physical Science Applications in Agriculture II, 30 lab exercises, 271p in 3-ring binder

Agriscience Kits



Ten Agriscience Teaching Kits are designed to help teach science to students K through 8. These self-contained, easy-to-use kits help students learn science through agriculture.





Eggciting Experiments– Chick Incubation and Embryology

Students participate in a 5-week study of living organisms including incubation of chicken eggs, charting events as the embryos develop in the eggs, and observation and care of the hatched chicks.

Complete Kit

AK-01 with Activity Guide and Videotape\$216.00

Consumable Replacement Pack AK-01.1 \$25.20



Videotapes were produced by the Illinois Farm Bureau for ten kits—AK-01 thru AK-10. Field advisors from Facilitating Coordination in Agriculture Education (FCAE) explain each of the ten kits and provide useful directions for their effective use.

Activity Guide Only AK-01.2 (in 3-ring binder) \$9.80

Videotape **Only** AK-01V\$6.50



Agriculture Renews Our Planet-Growing Energy for the Future

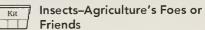
Students compare soyink with petroleum-based ink, make biodegradable plastics from corn, and compare renewable and nonrenewable natural resources.

Complete Kit
AK-02 with Activity Guide \$155.50

Consumable Replacement Pack AK-02.1 \$39.50

Activity Guide Only AK-02.2 (in 3-ring binder) \$5.95

Videotape Only AK-02V\$6.50



Students study the parts of a grasshopper and compare it to close relatives, study and compare honeybee queens, drones, and workers, and study the role of the honeybee in plant pollination (no Replacement Pack).

Complete Kit
AK-03 with Activity Guide and
Videotape\$117.00

Activity Guide Only AK-03.2 (in 3-ring binder) \$7.05

Videotape Only AK-03V\$6.50

Probing Our Soils-Getting to the Roots of Agriculture

Students collect soil samples, study soil texture and structure, determine acid and base reactions, measure pH, compare moisture holding capacity of different soils, and examine the effects of soil erosion and pollutants.

 Consumable Replacement Pack AK-04.1 \$39.50 **Activity Guide Only** AK-04.2 (in 3-ring binder) \$7.60 Videotape Only AK-04V \$6.50



Protein Providers-The Superb Soybean

Students examine the effect of water on seeds, learn the parts of seeds, compare monocot with dicot seeds and plants, study the effects of temperature variations on seed germination and plant growth, and investigate the many uses of soybean products in our lives.

Complete Kit

AK-05 with	Activity Guide and	d l
Videotape		\$172.00

Consumable Replacement Pack AK-05.1 \$28.50

Activity Guide Only AK-05.2 (in 3-ring binder) \$7.60

Videotape Only AK-05V \$6.50

Five Activity Guides—AK-01.2 thru AK-05.2—in 1" 3-ring Binder AK-05.3 \$19.15





Animals in Agriculture— Their Growth and Development

Students compare common food products with a complete livestock feed, checking for protein, sugar, starch, fat, and vitamin C. They dissect a chicken wing, comparing it with the parts and functions of the human arm. Scale animal models are used to help learn about livestock weight estimates and weight gain.

Complete Kit

AK-06 with Activity Guide \$227.00

Consumable Replacement Pack AK-06.1 \$23.00 **Activity Guide Only**

AK-06.2 (in 3-ring binder) \$6.50

Videotape Only

AK-06V \$6.50



Dairy Delights—Good Dairy Delights—Go

This kit provides hands-on experiences for students as they become involved in demonstrating the processes of using milk and acids, enzymes, bacteria, heat, and cold to make glue, cottage cheese, yogurt, and ice cream.

Complete Kit

AK-07 with Activity Guide \$166.50

Consumable Replacement Pack AK-07.1 \$42.80

Activity Guide Only

AK-07.2 (in 3-ring binder) \$6.50

Videotape Only

AK-07V \$6.50



Growing Better Every Day-Using Genetics to Improve Agriculture

Colored paper clips are used to illustrate genes and chromosome chains as students learn how traits are inherited by offspring from parents. A germination study of seeds which produce albino or normal green corn plants helps students understand genotypes and phenotypes. Students learn about probabilities of transmission of two genes from parent to offspring (no Replacement Pack).

Complete Kit

AK-08 with Activity Guide \$106.00

Activity Guide Only

AK-08.2 (in 3-ring binder) \$9.80

Videotape Only

AK-08V \$6.50



Agriculture Measures Up— Using Mathematics in Agriculture

Students compute the areas and calculate the perimeters of enclosures as they study the most economical use of fencing. A small jar of shelled corn is used to simulate a grain bin as students learn to estimate weights, numbers, and volumes. Students determine the amount of fertilizer needed for the lawn of a problem home after they have calculated the

areas of the lot, house, garage, and driveway (no Replacement Pack).

Complete Kit

AK-09 with Activity Guide \$106.00

Activity Guide Only

AK-09.2 (in 3-ring binder) \$6.80

Videotape Only

AK-09V \$6.50





Rain or Shine—Weather's Effect on Agriculture

Students build a terrarium to observe the water cycle and compare the growth rates of three types of plants. Students build growth chambers to observe how various light colors influence plant growth. They use varying fertilizer rates in an attempt to grow larger, healthier plants.

Complete Kit

AK-10 with Activity Guide \$111.50

Consumable Replacement Pack

AK-10.1 \$17.50

Activity Guide Only AK-10.2 (in 3-ring binder) \$7.30

Videotape Only AK-10V \$6.50

Five Activity Guides-AK-06.2 thru AK-10.2—in 1" 3-ring Binder AK-10.3 \$18.60

Ten Activity Guides—AK-01.2 thru AK-10.2—in 1 1/2" 3-ring Binder AK-10.4 \$34.00

Set of Ten Videotapes

AK-10.5V \$56.00





Soil Erosion Hands-on Science Kit



See inside back cover for details.

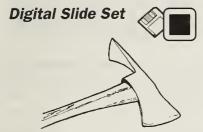
Forestry

Transparencies



Forest Tree Identification, 92 fr. Over 90 native forest species are illustrated with leaf, flower and/or fruit, and leaf arrangement characteristics. An enlarged twig illustration shows terminal buds and leaf scars in sufficient detail to teach identification features.

T780 \$61.15



Forestry Tool Identification, 45 fr. Illustrates 40 forestry tools with color photographs. This set shows tools on the Illinois forestry tool identification list. DS706 comes on two 3.5-inch disks. This program runs under Windows 3.X or Windows 95, but printing is restricted to Windows 95.



DS706 \$20.00

Grain Production

Units

Crop Breeding: Corn, 28p
Describes the importance of the corn crop, its breeding history, taxonomic relationships, crop characteristics, and breeding objectives. It includes a glossary and shows the steps in making a controlled cross for the crop.

AU8011 \$2.80

Growing Wheat U4027b 28p	\$2.80
Corn Production U4039b 20p	\$2.00
Growing Grain Sorghum U4055a 20p	\$2.00
Growing Canola U4088 24p	\$2.40

Digital Slide Set



Corn Insect Scouting Guide
Leads you through scouting and
control procedures for common corn
insects in 74 frames. By interactively
selecting timing of damage and the
type of damage, you arrive at line
drawings and color photos of insects
and learn about scouting procedures
and thresholds for treatment. Color
photographs of the insects and the
ability to print descriptions, controls,
line drawings, and management
worksheets are additional features.

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DS704 \$25.00

Pesticides

Units



Safe Use of Farm Chemicals Series Safety in the use, storage, and application of agricultural chemicals is a common goal of

agriculturists and the general public. This series of 5 manuals and glossary covers the major aspects of agricultural pesticides and their safe use.

Pesticide Use: A Benefit/Risk Analysis U4080 20p\$2.00

Reading Chemical Container Labels U4081 16p\$1.60

Using Farm Chemicals Safely U4082 24p\$2.40

Managing the Environmental In of Pesticides	npact
U4083 24p	\$2.40
Pesticide Application: Equipme	nt &
Calibration	
U4084 28p	\$2.80
Glossary of Pesticide Terms	
U4085 8p	\$.80

Transparencies, Study Guide, Cassette Tape

Safe Use of Pesticides
Pesticide types, formulations,
classification, labels, and warnings are
described in detail. Protective
clothing and equipment and safe
practices are illustrated.

T790 40 fr., w/guide* \$27.35

Soils

Units

Managing Soil pH: Agronomic Crops, 24p

Various sections of this publication discuss soil pH adjustment and include pH and limestone problems to be solved. Activities are comparing pH testing technologies, measuring the pH of the water, and a classroom study of the effect of limestone on field soil.

AU8040 \$2.40
Collecting and Preparing Soil Samples for Testing U4001a 16p\$1.60
pH Test for Soil Acidity U4002a 8p\$.80
Phosphorus Management U4003c 16p \$1.60
Determining Available Potassium in Soils
U4004b 12p \$ 1.20
Nature of Soil Acidity and Major

U4005 4p\$.40

Plant Nutrients

Soil Liming-A Key to Better Farming U4006a 8p\$.80
Potassium Management U4008b 12p \$ 1.20
Planning the Nitrogen Program U4009b 16p\$1.60
Planning a Fertilizer Program U4010a 8p\$.80
Hunger Signs in Crops U4011b (with color insert), 12p \$1.50
Understanding Soils U4052a 20p\$2.00
Using the Illinois Land-Use Scorecard U4053a 28p\$2.80
Using the Universal Soil Loss Equation to Estimate Soil Loss U4054b 20p\$2.00

Filmstrips, Slide Sets, Study Guides, Cassette Tapes

Collecting and Preparing Soil Samples for Testing

Since soil testing is so important in making the best decisions for proper application of fertilizers, this film is basic to introducing soil management principles.

F703a	Filmstrip,	36	fr.	 \$13.60
S703a	Slide set,	36	fr.	 \$20.80

Soil Color

Compares and contrasts soil colors and relates differences to soil origins and management practices.

F708 Fil	mstrip,	47 f	r	\$17	.45
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Conservation Systems Workshop Material

Users will learn how to estimate water and wind erosion, identify resource problems, and select economical solutions. Includes information on leaving enough residue to reduce soil erosion and comply with state and federal erosion guidelines. Each title includes study guide and cassette tape.

Conservation Planning: A Tool for Better Resource Management

F726-1	Filmstrip,	80 fr	\$14.85
S726-1	Slide set,	80 fr	\$22.85

The Water Erosion Process			
F726-2 Filmstrip, 80 fr	\$14.85		
S726-2 Slide set. 80 fr	\$22.85		

Controlling Water Erosion with Conservation Planning

F726-3	Filmstrip,	80 fr	\$14.85
S726-3	Slide set,	80 fr	\$22.85

The Wind Erosion Process

F726-4	Filmstrip,	80 fr	\$14.85
S726-4	Slide set.	80 fr	\$22.85

Controlling Wind Erosion with Conservation Planning

F726-5	Filmstrip,	80	fr	\$14.85
S726-5	Slide set,	80	fr	\$22.85

Managing Residue to Reduce Erosion

F726-6 Filmstrip, 77 fr	\$14.40
S726-6 Slide set, 77 fr	\$22.10

USDA Resource Conservation Systems Application Program

Sound management is the key phrase and purpose for conservation tillage, grass waterways, and contouring. These filmstrips or slide sets provide the information and framework for applying these practices to the land. Each title includes a study guide and cassette tape.

Applying Profitable Resource Conserving No-Till Systems

conscioning ito im systems	
F760 Filmstrip, 71 fr	\$13.50
S760 Slide set, 71 fr	\$20.60

Applying Profitable Resource Conserving Mulch-Till Systems

F761	Filmstrip,	72 fr	\$13.65
S761	Slide set,	72 fr	\$20.85

Designing, Applying, and Maintaining Contoured Fields

F762 Filmstrip,	77	fr	\$14.40
S762 Slide set,	77	fr	\$22.10

Designing, Constructing, and Maintaining Grass Waterways

Maintaining Grass Waterways			
F763 Filmstrip, 65 fr	\$12.60		
S763 Slide set, 65 fr	\$19.10		

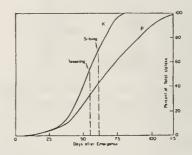
* Cassette tapes of study guides are available at a cost of \$3.85.

Transparencies, Study Guide, Cassette Tape

Soil Science

Introduces the science of classifying and managing soils. Graphically illustrates soil particle size, textural classes, and common types of soil structure.

T701 3	? fr	\$22.15
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Soil Testing and Fertility

Shows equipment, procedures, and test results of soil testing. Explains how nutrients are held in soils and how soil environmental conditions affect added nutrients. Charts point out the benefits of nutrient application.

T702 57 fr., w/guide* \$40.40

Soybeans

Unit

Soybean Production	
U4033b 20p	\$2.00

Digital Slide Set



Soybean Insect Identification Key Keys out soybean insects in 99 frames. Also prints an index of chemical controls

DS703 \$25.0			DS703		\$25.00
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Weeds

Units

The Weed Factor, 8p

Discusses how weeds and their seeds impact agriculture. Lists primary noxious, secondary noxious, and common weeds that are likely to occur in corn, soybeans, wheat, and oats in Illinois.

U4073.....\$.80

Filmstrips, Slide Sets



Weed Identification

Illustrates all the weeds on the Illinois Crops Career Development Event weed identification list. Each frame has common name, one to three photographs per weed, and frame numbers. Comes with a study guide containing descriptive text.

Weed Identification Practice Set
Designed for practice and testing, this
set starts with a listing of weeds and
frame numbers, as stamped on the
slide mountings, to serve as a key for
the set. Weed photos have no
associated weed names or frame

F791c(Supp)Filmstrip, 70 fr..... \$25.50 S791c(Supp)Slide Set, 70 fr. ... \$39.50

numbers.

Identification of Weed Seeds F793 Filmstrip, 68 fr. \$10.20 S793 Slide set, 68 fr. \$17.00

Practice Set for 793
F793(Supp) Filmstrip, 70 fr. \$10.50
S793(Supp) Slide set, 70 fr. \$17.50

Transparencies, Study Guide

How Herbicides Work

Shows how weeds reduce crop yields and why good control is important. Illustrates life cycles of annuals, biennials, and perennials. Describes herbicides and how they work. Briefly reviews application equipment and its use.

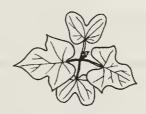
T700 46 fr. \$31.25

Herbicide Modes of Action

A basic look at the major classes of herbicides and how they work on and in weed and crop plants. Useful for understanding crop injury due to herbicides. Gives examples of herbicides in various classes.

T710 14 fr., w/guide \$12.45

Digital Slide Sets



Broadleaf Weed Identification Key Uses line drawings to key out 26 common broadleaf weeds of soybeans and corn. Also prints a listing of weeds and their chemical controls.



DS701 \$25.00



Grass Weed Identification Key
Uses line drawings to key out 19
common grass and grasslike weeds of
soybeans and corn. Also prints out a
listing of weeds and their chemical
controls.



DS702 \$20.00



Common Row Crop Weeds

Forty-eight weeds are illustrated in this presentation. Covers annual grasses, annual broadleaves, biennial broadleaves, and perennial weeds. Gives information about vegetative characteristics needed to identify seedlings at a young age, when weed control chemicals are most effective. Prints a list of the weeds and also prints drawings of key vegetative features used for identification. This program runs under Windows 3.X or Windows 95, but printing is restricted to Windows 95.



DS710 \$25.00

Common Row Crop Weeds Practice Set

Repeats the photographs in DS710 without labels and is suitable for review and testing. Photographs are grouped into annual grass, annual broadleaf, biennial broadleaf, and perennial weed categories for the convenience of the instructor. Prints a key to the photographs and includes suggestions for creating an on-screen quiz. This program runs under Windows 3.X or Windows 95, but printing is restricted to Windows 95.



D\$710qz.....\$20.00

Weed Identification, Part 1

Illustrates half of the weeds of the Illinois Association Vocational Agriculture Teachers State Crops Career Development Event. Weeds from barnyardgrass to horsenettle are illustrated with one or more photos each. The remainder of the list is illustrated in DS708. Has sound in the opening frames (requires sound capability on computer).



DS707 \$25.00

Weed Identification, Part 1 Practice Set

This is a practice set for DS707. Repeats the photographs in DS707 without labels and is suitable for review and testing. Includes suggestions for creating an on-screen quiz. Has sound in the opening frames (requires sound capability on computer).



DS707qz.....\$20.00

Weed Identification, Part 2
Illustrates the second half of the weeds of the Illinois Association
Vocational Agriculture Teachers State
Crops Career Development Event.
Weeds from horseweed (marestail) to yellow woodsorrel are illustrated with one or more photos each. The remainder of the list is illustrated in DS707. Has sound in the opening frames (requires sound capability on computer).



DS708 \$25.00

Weed Identification, Part 2 Practice Set

This is a practice set for DS708. Repeats the photographs in DS708 without labels and is suitable for review and testing. Includes suggestions for creating an on-screen quiz. Has sound in the opening frames (requires sound capability on computer).



DS708qz \$20.00

Photo CDs



Weed Identification

Illustrates all the weeds of the Illinois Crops Career Development Event weed identification list. Frames have common names, one to three photographs per weed, and frame numbers. Comes with a study guide with text describing each weed.



PCD108a \$47.00



Weed Identification Practice Set Introductory frames list weeds by common name and frame number to serve as a key. Images of weeds have no identifying name or frame number. The set is useful for practice and testing purposes.



PCD108a (Supp) \$45.00

Miscellaneous

Units

Integrated Pest Management Series IPM I, Ecology, Crops, and Pests introduces students to management techniques to keep insect and other pest populations at acceptable levels without harm to the environment. IPM II, Why IPM? demonstrates that indiscriminate pesticide use leads to serious problems.

Integrated Pest Management I, Ecology, Crops, Pests, 36p AU8004\$3.60

Integrated Pest Management II, Why IPM?, 36p AU8005\$3.60



Nontraditional Crops, 28p
Describes several nontraditional
crops, including kenaf, guayule,
rapeseed, crambe, castor, lesquerella,
milkweed, and others. An
introductory section lists factors to
consider when evaluating
nontraditional crops.

U4071.....\$2.80



Precision Agriculture, 28p

This unit provides a basic outline of precision agriculture and its components. The major sections of the publication are Introduction, Soil Sampling, Remote Sensing, Global Positioning Systems, Yield Monitors, Geographic Information Systems, Variable Rate Technology, and The Future. Color illustrations appear throughout the unit, and a companion Web site of precision agriculture Web links has been prepared.

U4074 \$	4.20
Introduction to Plant Biotechnol	o gy ,
U4086\$	2.80

Filmstrip, Slide Set, Study Guide, Cassette Tape

Integrated Pest Management
This program defines IPM and
examines the role of the field crop
scout. Diseases, insects, rodents and
birds, and weeds which damage crops
are discussed. Economic thresholds
and economic injury levels are
explained as they relate to the
development of an integrated pest
management program.

F1113 Filmstrip, 79 fr., w/guide* \$30.65 S1113 Slide set, 79 fr., w/guide* \$46.45



* Cassette tapes of study guides are available at a cost of \$3.85.

Transparencies

Practical Agronomy, 40 fr.

Provides general illustrations and reference tables for agronomy. Can be used to supplement lectures and talks or for projection during student lab exercises. Major categories are Breeding, Growth and Development, Soils and Nutrition, and Miscellaneous.

T730 \$27.35







Weed Identification Digital Slide Sets

MDS707 is a collection of 4 digital slide sets on CD-ROM. Includes DS707, DS707qz, DS708, and DS708qz. These presentations were developed to illustrate the weed identification list used in Illinois for the Illinois Association of Vocational Agriculture Teachers Crops Career Development Event. Each presentation folder has a text file with information about how the presentation is organized and contains some suggestions for using the presentation. Additional details are found within the presentations. If purchased separately, these programs would cost \$90.00.

MDS707 \$35.00





Agronomy Diseases and Pests Picture Sheets

X798 02 Stored-Grain Insects \$ 45

X/98.02 Stored-Grain Insects \$.45
X798.03 Grain Molds and
Vertebrate Storage Pests \$.45
X798.30 Corn Insects– Above Ground\$.45
Above Ground \$.45
X798.31 Corn Insects-
Below Ground \$.45
X798.40 Soybean Insects \$.45
X799.30 Corn Diseases I \$.45
X799.31 Corn Diseases II \$.45
X799.32 Corn Diseases III \$.45
X799.33 Corn Diseases IV \$.45
X799.34 Corn Diseases V \$.45
X799.35 Sorghum Diseases I \$.45
X799.36 Sorghum Diseases II \$.45
X799.40 Soybean Diseases I \$.45
X799.41 Soybean Diseases II \$.45
X799.50 Alfalfa Diseases I \$.45
X799.51 Alfalfa Diseases II \$.45
X799.60 Clover Diseases I \$.45
X799.61 Clover Diseases II \$.45
X799.62 Forage Grass Diseases \$.45
X799.70 Wheat Diseases I \$.45
X799.71 Wheat Diseases II \$.45
X799.80 Oat Diseases \$.45
X799.81 Barley and Rye Diseases
X898.01 Field Crop Weeds \$.45
X899.01 Corn Herbicide Injury I \$.45
X899.02 Corn Herbicide Injury II \$.45
X899.06 Soybean Herbicide Injury I
\$.45
X899.07 Soybean Herbicide Injury II\$.45
X899.16 Injury Symptoms from
Selected Herbicides \$.45
X899.17 Herbicide Injury– Meristematic Inhibitors I \$.45
X899.18 Herbicide Injury-
Meristematic Inhibitors II \$.45
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X899.19 Herbicide Injury–Plant Growth Regulators & Pigment Inhibitors \$.45 X899.20 Herbicide Injury– Photosynthetic Inhibitors & Contact Herbicides\$.45

Booklets, Binders, Manuals, Pocketbooks

Diseases and Pests of Field Crop Plants

An 8 1/2" x 11" spiral bound booklet with 31 photo identification sheets with one side of color photos and descriptions on the back. 31 sheets which include: Corn Diseases I-V, Sorghum Diseases I & II, Soybean Diseases I & II, Alfalfa Diseases I & II, Clover Diseases I & II, Forage Grass Diseases I, Wheat Diseases I & II, Oat Diseases, Barley and Rye Diseases, Corn Herbicide Injury I & II, Soybean Herbicide Injury I & II, Corn Insects-Above Ground, Corn Insects-Below Ground, Sovbean Insects, Stored Grain Insects and Molds, Injury Symptoms from Selected Herbicides, Herbicide Injury—Meristematic Inhibitors I, Herbicide Injury—Meristematic Inhibitors II, Herbicide Injury—Plant Growth Regulators and Pigment Inhibitors, and Herbicide Injury-Photosynthetic Inhibitors and Contact Herbicides.

MX799.91a Booklet \$12.50

Diseases and Pests Binder

A 3-ring binder containing all 74 color photo sheets is organized with 25 tab dividers. Major divisions of the binder include diseases, herbicide injury, pests, and weeds of agronomic and horticultural crops.

MX800 3-ring binder with 25 tab dividers and 74 color photo sheets ... \$37.00 X800 3-ring binder with 25 tab dividers\$12.00

Diseases of Soybeans and Corn

This 3" x 5 1/2" booklet (spiral-bound) is a guide to help identify diseases of soybeans and corn quickly and accurately. It assists in early, in-the-field identification when control measures are generally more effective. Over 50 different diseases are illustrated with color photos.

X830 Pocketbook \$4.50



Vegetative Identification of Common Row Crop Weeds This spiral-bound pocketbook has been revised and expanded. Describes 48 weeds.

X840a Pocketbook \$8.00

Broadleaf and Grass and Grasslike Weed Vegetative Identification Keys These keys describe 27 broadleaf and 20 grass or grasslike weed seedlings found in corn and soybeans. They focus primarily on characteristics of leaf arrangements, true leaves, grass ligules, and cotyledons. Sketches are used to determine proper identification.

Z840.1 Two keys, 8p \$1.25



Waterhemp Management in Agronomic Crops

In 12 pages, this booklet describes the biology and identification of waterhemp, considers its increased prevalence, and details interactions with soil-applied and postemergence herbicides in corn and soybean fields. Contains color photographs.

X855 Color booklet, 12p \$2.00

Crop Plants

Each 8 1/2" x 11" booklet has 40 sheets with clear color photographs that help identify plants quickly and accurately. Each crop plant is shown in 4 stages–seed, seedling, mature plant, and flower.

X860 Book, 82p \$11.25

Insect Pest Identification of Corn, Soybeans, and Alfalfa

A handy 3" x 5" pocketbook with 25 color photographs of insect pests. Describes damage, scouting procedures, and guidelines for control.

X870 Pocketbook, 52p \$3.00

Field Crop Scouting Manual

This 214-page, 8 1/2" by 11", spiral-bound manual is designed to aid in identification and evaluation of common pest problems in the field. It describes nutrient deficiencies, herbicide injury, insects, diseases, and other agronomic crop problems. Has 245 color photos identifying insects, injury and disease. Includes an illustrated broadleaf and grass weeds key. Extensive revision 1999.

The popular Field Crop Scouting Manual print publication is now available on CD-ROM. The digital version, like the printed manual, has 214 pages of information. The CD-ROM consists of portable document format (PDF) files that can be read on Windows or Macintosh computers using Adobe Acrobat Reader software (a free download from www.adobe.com/prodindex/acrobat/readstep.html). All the files on the CD-ROM are indexed and can be searched by keywords.

X880c Book, 214p..... \$40.00



CDR880c CD-ROM \$50.00



SETX880 CD-ROM + book \$75.00

Crop Science: A Laboratory Manual An 8 1/2" x 11" book that provides a well-balanced blend of fundamental principles of plant science and practical production information. Each chapter includes learning objectives, text, and laboratory exercises. Hands-on exercises develop skills and confidence. Written for the introductory level college class, but an excellent resource for high school agriculture.

X890 Book, 296p \$20.00

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Beef Cattle

Unit

Managir	ng the	Beef	Cow	Herd,	16p
U1010b			•••••		\$1.60

Filmstrips, Slide Sets

Breeds of Beef Cattle	
F102 Filmstrip, 26 fr \$	\$10.10
S102 Slide set, 26 fr	15.30

New and Exotic Breeds of Beef Cattle

F104 Filmstrip,	64 fr	\$23.40
S104 Slide set,	64 fr	\$36.20

Aberdeen Angus Judging Classes, Part I

F103-1.1	Filmstrip,	33 fr	\$4.95
S103-1.1	Slide set,	33 fr	\$8.25



Aberdeen	Angus	Judging	Classes,
Part II			

F103-1.2	Filmstrip,	31	fr	\$4.65
S103-1.2	Slide set,	31	fr	\$7.75

Hereford Judging Classes: Yearling Bulls and Yearling Heifers

F 103-2.1	riimsinp,	31	Ir	\$4.00
S103-2.1	Slide set,	31	fr	\$7.75

Judging Yearling Beef Heifers F106 Filmstrip, 38 fr. \$5.70 S106 Slide set, 38 fr. \$9.50

Additional Judging Materials on pages 28-30.

Livestock Judging Videotape Series on page 28.

Breeding & Selection

Units

Artificially Inseminating Livestock,	
16p	
U1002c\$1.	60

Breeding, 16p U1009a\$1	1.60
Judging Livestock, 20p U1019a\$2	2.00
Using Livestock Production Reco	rds,

U1061.....\$ 1.20

Improving Animals Through

Filmstrip, Slide Set, Study Guide



Embryo Transfer in Cattle F120 Filmstrip, 22 fr., w/guide .. \$10.70 S120 Slide set, 22 fr., w/guide ... \$15.10

Transparencies, Study Guide

Animal Genetics and Breeding	
T130a 47 fr., w/guide\$33.	90

Dairy Cattle

Units

Feeding Dairy Cattle, 16p U1020b\$1.60
Raising Dairy Heifers and Bulls, 8p U1022\$.80
The Cow's Udder and How It Functions, 12p U1025\$ 1.20
Dairy Cattle Breeds , 12p U1046\$ 1.20

Filmstrips, Slide Sets

Selecting Dairy Cattle	
F207a Filmstrip, 61 fr	\$22.35
S207a Slide set, 61 fr	\$34.55

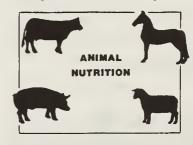
The Cow's Udder and How It Functions F208a Filmstrip, 48 fr\$17.80
Breeds of Dairy Cattle F210 Filmstrip, 38 fr
Holstein Judging Classes F211-1.1 Filmstrip, 32 fr \$12.20 S211-1.1 Slide set, 32 fr \$18.60
Guernsey Judging Classes F211-2.1 Filmstrip, 32 fr \$12.20 S211-2.1 Slide set, 32 fr \$18.60

Feeds & Feeding

Unit

General Facts on Livestock Feeding,
8p
U1013a\$.80

Transparencies, Study Guide



Animal Nutrition
T131 72 fr., w/guide\$50.15

Horses

Units

Caring for the	Brood	Mare	and	Fo	al,
8p					
U1041				\$.	80

Horse Management, 20p An introduction to horse care that touches on anatomy, breeds, facilities, equipment, feeding, and health care.

U1042.....\$2.00





Horse Reproduction, 12p Learn the basics about breeding, foaling, and care of the mare, stallion, and foal.

U1043\$ 1.20
Horses and Horsemanship, 44p
U1047\$4.40

Filmstrips, Slide Sets, Study Guide, Cassette Tape

Good Horsemanship F150 Filmstrip, 43 fr \$6.45 S150 Slide set, 43 fr \$10.75
Horse Feeding and Nutrition F152 Filmstrip, 79 fr., w/guide*
\$152 Slide set, 79 fr., w/guide* \$20.70

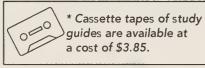
Transparencies



Horse Transparencies T150 40 fr.\$27.35

Approved Practices for Horses
This material has information on parts
of the horse, parts of the hoof,
common hoof and legs problems, and
conformation tips. It touches on
genetics, health, reproduction, and
management topics.

T151 40 fr. \$27.35





Meats

Flash Cards



Retail Meat Cut Identification—Flash Card Set

This is the easiest way to teach or learn to recognize the common retail cuts of beef, pork, and lamb! These 5" x 7" cards, with cut descriptions on the back, showcase 126 full-color photographs of the retail cuts of meat. Each image is printed on high-quality, glossy-finished card stock and comes in a custom-designed box.

X180b 150 cards\$75.00

Filmstrips, Slide Sets, Study Guides, Cassette Tapes

Identif	ication of	Retail Mea	t Cuts
F180-1	Filmstrip,	110 fr	\$39.50
S180-1	Slide set,	110 fr	\$61.50

Identification of Kinds of Meat F181a Filmstrip, 33 fr. \$12.55 S181a Slide set, 33 fr. \$19.15



Retail Beef Cut Identification— Labeled Set

Full-color photographs of the retail cuts of beef used in many state 4-H and FFA events. Each frame shows the retail name with an identifying frame number.

F183b Filmstrip, 74 fr., w/guide
\$28.90
S183b Slide set, 74 fr., w/guide
\$43.70



Retail Beef Cut Identification
This film has no identifying numbers or labels and is suitable for review and testing purposes.



Retail Pork and Lamb Cut Identification—Labeled Set

Shows the retail cuts of pork and lamb. Each numbered and labeled frame is in full color.



Retail Pork and Lamb Cut Identification

Suitable for testing and review purposes. Has no identifying numbers or labels.

F186(Supp) Filmstrip, 79 fr., w/guide
\$30.65
S186(Supp) Slide set, 79 fr., w/guide
\$46.45

Quality and	Yield	Grading	of Beef
Carcasses			

Beef Slaughtering

F261 Filmstrip, 81 fr., w/guide*\$31.35 S261 Slide set, 81 fr., w/guide*\$47.55

Pork Carcass Cutting and Processing, Part I and Part II

F264-1 Filmstrip, 97 fr., w/guide*...... \$36.95 F264-2 Filmstrip, 64 fr., w/guide*...... \$25.40

\$264-1 Slide set, 97 fr., w/guide* \$56.35 \$264-2 Slide set, 64 fr., w/guide* \$38.20

Meat Evaluation Classes, Part I: Beef F270-1 Filmstrip, 100 fr., w/guide*..... \$38.00 \$270-1 Slide set, 100 fr., w/guide*.....

......\$58.00

Meat Evaluation Classes, Part II: Pork & Lamb

F270-2 Filmstrip, 85 fr., w/guide* \$32.75 \$270-2 Slide set, 85 fr., w/guide* \$49.75

Photo CDs



Retail Beef Cut Identification
The 67 photos contained on this
Kodak Photo CD are of the retail cuts
of beef. It is suitable to use for
teaching or for review purposes.



Retail Pork and Lamb Cut Identification

The 75 photos contained on this Kodak Photo CD are of the retail cuts of pork and lamb. This item can be used for teaching or for review.





Retail Beef Cut Identification— Labeled Set

The 67 photos on this compact disc are of the retail cuts of beef. Each is labeled with the wholesale cut name and the retail cut name.



PCD111L\$45.00

Retail Pork and Lamb Cut Identification—Labeled Set

The 75 photos on this compact disc are of the retail cuts of pork and lamb. Each picture is labeled with the wholesale cut name as well as the retail cut name.



PCD112L\$45.00

Goats

Filmstrip, Slide Set, Study Guide, Cassette Tape



Seathern are considered the best stifflers and the trast supposite of the Swars tairs goal breeds.

Breeds of Goats

Sheep

Units

The Sheep Enterprise, 4p U1031a\$.40
Breeds of Sheep, 36p U1049a\$3.60
Feeding & Managing Sheep & Lambs, 16p

U1060.....\$1.60

Filmstrips, Slide Sets, Study Guides, Cassette Tapes

Breads of Sheen

breeds or sneep	
F145a Filmstrip, 71 fr., w/guide*	
\$27.85	5
F145a(Supp) Filmstrip, Practice Set fo	r
F145a, 39 fr \$14.65	5
S145a Slide set, 71 fr., w/guide*	
\$42.05	5
\$42.05 \$145a(Supp) Slide set, Practice Set fo	5 r
\$42.05	5 r

Hampshire Sheep Judging Classes: Part I

F146-1.1	Filmstrip,	36 fr	\$5.40
S146-1.1	Slide set,	36 fr	\$9.00

Hampshire Sheep Judging Classes: Part II

F146-1.2 Filmstrip,	35 fr\$5.25
S146-1.2 Slide set,	35 fr \$8.75

Transparencies

Sheep	p Transparencies		
T140	50 fr	\$33.	85

Sheep Health Management Calendar T141 15 fr.....\$11.10

Digital Slide Sets



Breed	s of Sheep,	Part 1	
	DS145.1a.		. \$15.00

Breeds of Sheep, Part 2 DS145.2a....\$15.00



Small Animals & Companion Animals

Units



Rabbit Raising, 12p U1050\$ 1.20
Caring for the Small Laying Flock, 8p U1052\$.80
Feeding and Care of Dogs, 16p

Filmstrips, Slide Sets, Study Guides

Broads of Dogs

F190-1 Filmstrip, Part I, 76 fr., w/ guide	
F190-2 Filmstrip, Part II, 80 fr., w/guide\$31.00	
\$190-1 Slide set, Part I, 76 fr., w/ guide\$44.80 \$190-2 Slide set, Part II, 80 fr., w/guide\$47.00	

Complete Breeds of Dogs Series
MF190-1 2 Filmstrips, w/guides
\$48.50
MS190-1 2 Slide sets, w/guides
\$73.45

Transparencies, Study Guide

Raising Rabbits		
T155 21 fr., w/guide	 \$17.	.00

Swine

Units

U1029a\$.80
Selecting and Purchasing Hogs, 8	р 80

Caring for the Swine Herd During
Breeding & Gestation, 4p
U1034a \$.40

Swine Feeds and Feeding, 16p U1036a\$1.60

Caring for the Sow & Litter at	
Farrowing Time, 8p	
U1037b\$.80	C



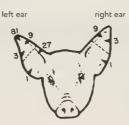


Feed Rations for Swine, 28p	
U1064\$2.80	

Filmstrips, Slide Sets, Study Guides

Breeds of Swine F164b Filmstrip, 76 fr., w/guide
\$29.60 F164b(Supp) Filmstrip, Practice Set for F164b, 38 fr
\$164b Slide set, 76 fr., w/guide \$44.80
S164b(Supp) Slide set, Practice Set for S164b, 38 fr\$21.90
Digestion in Swine F170 Filmstrip, 47 fr\$7.05
Duroc Swine Judging Classes F171-1.1 Filmstrip, 30 fr

Transparencies, Study Guides



Swine Transparencies		
T160a 36 fr., w/guide	\$11.	.90
Swine Rations		
T161_40 fr_w/quide	\$13	10

Miscellaneous

Units

Common Livestock Diseases, 20p U1005\$2.00
Digestion in Animals, 4p U1026a\$.40
Castrating, Docking & Dehorning, 8p U1032\$.80
Using Rope in Animal Agriculture, 12p U1053\$ 1.20
Animals in World Agriculture, 20p U1058\$2.00



Caring for Animals, 16p Presents an overall view of humane animal care, from the goals of an animal project to its well-being, quality assurance, and show ring ethics.

U1065\$	1	.6	()
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Approved Practices

Approved Practices for Beef, 4p A100\$.40
Approved Practices for Sheep, 4p A140\$.40
Approved Practices for Swine, 4p A160\$.40
Approved Practices for Dairy, 4p A200\$.40



Floriculture

Units



Growing Plants from Seeds, 44p Has information about germination requirements, special treatments, and planting procedures. Activities include Calculating, Learning about Monocotyledons and Dicotyledons, Germinating Lettuce in Light and Dark, Eliminating Germination Inhibitors, Performing the Warm Germination Test, Performing the Tetrazolium Test for Seed Viability, Making a Seed Storage Chamber, Building a Fluorescent Light Garden, and Building a Cold Frame.

AU8020		\$4.40
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Plant Tissue Culture: Sterile Technique, 20p

Describes the general procedures for plant tissue culture and features information about contaminants and their control.

AU8030	\$2.00
Producing Plants by Asexual Propagation, 20p	
U5006a	\$2.00
Growing Flowering Annuals, 24	
U5010a	\$2.40

Preparing Plant Materials for Dried Arrangements, 20p U5035.....\$2.00



Herbaceous Perennials for Landscaping, 56p

Combines information from filmstrips/ slide sets 655 to 657. Contains an extensive chart of plant features, plus sections on propagation, designing, planting, maintaining, and shopping for perennials.

U5041.....\$5.60

Filmstrips, Slide Sets, Study Guides, Cassette Tapes



Introduction to Plant Propagation by Tissue Culture

Introduces the viewer to the concept of growing plants by tissue culture. Supplies, equipment, and techniques used in tissue culture are described.

F600-1 Filmstrip, 61 fr., w/guide*
\$10.10
S600-1 Slide set, 61 fr., w/guide*
\$16.20



Bedding Plants, Part 1

Shows 17 annual bedding plants and gives cultural information. Practice sets are useful for review and testing.

F601a Filmstrip, 63 fr., w/guide. \$25.05

Practice set for F601a

F601a(Supp) Filmstrip, 44 fr \$16.40
Part 1 S601a Slide set, 63 fr., w/guide \$37.65
Practice set for S601a

S601a(Supp) Slide set, 44 fr. ... \$25.20

Bedding Plants, Part 2

Part 2 shows 22 bedding plants grown for flowers and foliage.

Part 2

F602a Filmstrip, 75 fr., w/guide......\$29.25

Practice set for F602a

F602a(Supp) Filmstrip, 50 fr.... \$18.50

Part 2

S602a Slide set, 75 fr., w/guide\$44.25

Practice set for S602a

S602a(Supp) Slide set, 50 fr. ... \$28.50

Diseases of Garden Flowers

Provides information needed for identification and control of common diseases of garden flowers.

F604 Filmstrip, 78 fr., w/guide*
\$30.30
S604 Slide set, 78 fr., w/guide*
\$45.90

Wiring and Taping Flowers and Foliage

Methods are explained for replacing or reinforcing natural plant stems with artificial ones. Common wire sizes, special wiring aids, wiring techniques, taping, and using picking machines are illustrated.

F606-2 Filmstrip, 33 fr., w/guide*\$5.90 S606-2 Slide set, 33 fr., w/guide*\$9.20



Preserving Flowers and Foliage The pressing, air drying, burying, and glycerinating methods of drying and processing flowers and foliage are described. The microwave oven is featured as an aid to burying-type drying. Photographs of flowers and foliage that preserve well are

F607 Filmstrip, 65 fr., w/guide* \$10.70 S607 Slide set, 65 fr., w/quide*\$17.20

accompanied by a guide to appropriate drying methods.



Modified Stems and Roots

This filmstrip or slide set of 74 frames shows various modified stems (corms, tubers, tunicate bulbs, scaly bulbs, rhizomes, crowns, offshoots, stolons, spurs) and modified roots (tuberous roots). Photos of these structures and various photos of horticultural plants with these structures are featured. The importance of these modified plant parts for propagation is stressed. Comes with a study guide that has descriptions and text for each frame.

F608	Filmstrip,	74 fr.,	w/guide.	
				\$28.90
S608	Slide set,	74 fr.,	w/guide.	
				\$43.70



Herbaceous Perennials Series Includes habit photographs of herbaceous perennials, plus close-up photos of flowers. On-screen notes on culture and use of plants are provided. 655 describes 30 perennials; 656 describes 24 perennials; 657 describes 27 perennials. Practice sets are suitable for review and testing.

F655 Part 1, Filmstrip, 77 fr., w/	
F655(Supp) Practice set for F65	5,
47 fr S F656 Part 2, Filmstrip, 69 fr., w/	
	\$27.15
F656(Supp) Practice set for F656 45 fr	
F657 Part 3, Filmstrip, 81 fr., w/	_
	DO 1.33

S655 Part 1, Slide set, 77 fr., w/guide 	F657(Supp) Practice set for F657, 56 fr \$20.60
\$655(Supp) Practice set for \$655, 47 fr. \$26.85 \$656 Part 2, Slide set, 69 fr., w/guide \$40.95 \$656(Supp) Practice set for \$656, 45 fr. \$25.75 \$657 Part 3, Slide set, 81 fr., w/guide \$47.55 \$657(Supp) Practice set for \$657,	
\$656 Part 2, Slide set, 69 fr., w/guide 	S655(Supp) Practice set for S655,
\$656(Supp) Practice set for \$656, 45 fr\$25.75 \$657 Part 3, Slide set, 81 fr., w/guide \$47.55 \$657(Supp) Practice set for \$657,	S656 Part 2, Slide set, 69 fr., w/guide
S657 Part 3, Slide set, 81 fr., w/guide \$47.55 S657(Supp) Practice set for S657,	S656(Supp) Practice set for S656,
S657(Supp) Practice set for S657,	S657 Part 3, Slide set, 81 fr., w/guide
	S657(Supp) Practice set for S657,

Complete Herbaceous Perennials Series	
MF655 6 Filmstrips, w/guides	
MS655 6 Slide sets, w/guides	

Ornamental Grasses

Includes habit photographs of 19 ornamental grasses, as well as close-up photos of certain ornamental characters. Notes on culture and use are provided.

F660 Filmstrip, 61 tr., w/guide \$24.35
F660(Supp) Practice set for F660,
42 fr \$15.70

S660 Slide set, 61 fr., w/guide \$36.55 S660(Supp) Practice set for S660, 42 fr. \$24.10



Hardy Spring Flowering Bulbs
This film illustrates 19 bulbs that are hardy to at least USDA hardiness zone
6. There are photos of each bulb in flower and text that gives common and scientific names, use, and culture hints. The study guide includes a chart of the 12 divisions of the genus Narcissus. The practice set can be used for review and testing.

F665 Filmstrip, 62 fr., w/guide
\$24.70
F665(Supp) Practice set for F665,
38 fr \$14.30

S665 Slide set, 62 fr., w/guide \$37.10 S665(Supp) Practice set for S665, 38 fr. \$21.90

Growing Plants from Seeds

This filmstrip or slide set of 79 frames is supporting material for AU8020, Growing Plants from Seeds. This presentation covers the basics of seeds, their makeup, plant life cycles, steps in growing from seeds, and pointers for shopping for bedding plants.

F8020 Filmstrip, 79 fr., w/guide
\$30.65
S8020 Slide Set, 79 fr., w/guide
\$46.45

Transparencies, Study Guide



The Principles of Floral Design Explains design elements used in every good floral design. Emphasized are various major floral design principles, including Proportion, Balance, Rhythm, and Dominance. Radiation, repetition, transition, variety, and contrast are explained as minor design principles.

T620 42 fr., w/guide \$30.65

Digital Slide Sets

Annual Bedding Plants
Consists of color bedding plant
photographs and accompanying
screens of text. In all, 17 annual
bedding plants are illustrated in 23
photos. Has on-screen interactive
buttons.

DS601 \$20.00





Annual Bedding Plants Practice Set Similar to practice sets for conventional slide sets and filmstrips, this set consists of the photos in DS601. There are no identifying names or frame numbers associated with the photos, so the set can be used for review or quizzes.

DS601qz.....\$15.00

Annual Bedding Plants 2This set has 24 photos of 18 bedding plants, including 3 vegetables.

DS602 \$15.00

Annual Bedding Plants 2 Practice Set Consists of photos with no identifying names—suitable for review and quizzes. Frame 3 of the set is a key that identifies all plants in the set.

DS602qz \$15.00

Photo CD





Modified Stems and Roots

This photo CD contains 93 frames that show various modified stems (corms, tubers, tunicate bulbs, scaly bulbs, rhizomes, crowns, offshoots, stolons, spurs) and modified roots (tuberous roots). Photos of these structures and various photos of horticultural plants with these structures are featured. The importance of these modified plant parts for propagation is stressed. Comes with a study guide that has descriptions and text for each frame.



PCD119 w/guide \$47.00

Fruits

Units

Growing Strawberries, 28p	
U5027	\$2.80

Strawberry Cultivars, 8p (color) U5027(Supp)\$1.55

Filmstrip, Slide Set, Study Guide



T-Bud Grafting

Shows the terms and techniques of T-bud grafting as a laboratory exercise. The science background, the actual timing of preparations, conducting the grafting, and expected outcomes are described and illustrated by color photographs.

F640	39 fr., w/guide	\$6.80
S640	39 fr., w/quide	\$10.70

Digital Slide Sets



T-Bud Grafting

Explains the materials and procedures for making a dwarf apple tree using the T-bud grafting technique.
Contains color photos and line art. Includes interactive buttons to define key horticultural terms and concepts.



DS640 \$20.00





Planting and Training a Dwarf Apple Tree

In 56 frames, shows procedures for planting a dwarf apple and training it during the first 3 years. Includes a month-by-month calendar of activities. A logical follow-up to DS640 T-Bud Grafting.

DS642 \$20.00









Growing Apple Trees

Ninety-five frames of information about grafting, choosing a site, planting, and growing apple trees; this photo CD features common cultural procedures, has popular apple cultivar descriptions, and illustrates major diseases and pests. A good overview of apple tree culture that comes with a 28-page study guide.



PCD117 w/guide \$47.00

Landscaping & Landscape Materials

Units

Managing Landscape Waste, 28p This unit explains the scientific aspects of decomposition and outlines strategies for recycling landscape wastes. Includes plans for a 3-bin composting center and an in-class activity that demonstrates best composting techniques.

AU8031 \$2.80

Managing Community Landscape Waste, 20p

From site selection through collection and processing to eventual distribution of the finished materials, strategies are described for several levels of complexity.

AU8032 \$2.00



Trees for Landscaping (with 8-p	age
color insert), 44p	
U5001a	\$5.00

Fertilizing and Watering Shade and Ornamental Trees, 12p U5003......\$ 1.20

Identifying Tree and Shrub Insects, 16p

U5021 \$1.60 Vines for Landscaping, 40p

U5034.....\$4.00

Plant Hardiness, 12p U5037 \$ 1.20 Pruning and Care of Trees and

Shrubs, 60p U5040......\$6.00

Filmstrips, Slide Sets, Study Guides, Cassette Tapes

Introduction to Landscape Design First in a three-part series, this film introduces a step-by-step procedure for developing a good landscape plan. The film is arranged in 4 major subtopics: Site Analysis, Design Concepts, Design Elements, and Design Mechanics.

F621-1 Filmstrip, 80 fr., w/guide*
\$31.00
S621-1 Slide set, 80 fr., w/guide*
\$47.00



Creating a Design

Uses background information from 621-1 to lead the student into developing a design. Drawing mechanics are given special emphasis, as is Designing Walks and Driveways, Patios and Construction Materials, Patio Construction, Designing Planting Beds and Lawn Areas, Designing Fences and Storage, Maintaining Design Lines on the Ground, and Flowers and Roses in the Garden.

F621-2 Filmstrip, 81 fr., w/guide* \$31.35 S621-2 Slide set, 81 fr., w/guide* \$47.55

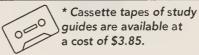
Putting Plants into the Design Correct procedures for putting plants into the design are presented. Bed staking, edging, bed preparation, planting hole excavation, top pruning, root pruning, mulching, boulder and rock incorporation, tree staking and guying, bricks and pavers, and retaining walls are featured.

F621-3 Filmstrip, 81 fr., w/guide* \$31.35 S621-3 Slide set, 81 fr., w/guide* \$47.55



Landscaping Small Gardens
This filmstrip or slide set of 100
frames shows small gardens and the
plants that are appropriate to use
when landscaping small gardens.

Identifying Coniferous Trees F504 Filmstrip, 59 fr. \$8.85



Tree Identification

Shows tree identification characteristics as line drawings, habit illustrations, and color photos. Includes information on culture and growth rate, as well as highlighting landscape potential.

S636 Slide set, 204fr. \$113.20

Major Pruning of Trees

Describes pruning techniques such as repairing a broken leader and a split crotch. Emphasis is placed on pruning plant parts which have been damaged by ice, wind, insects, disease, and crossed branches.

F639 Filmstrip, 53 fr., w/guide*
\$21.55
S639 Slide set, 53 fr., w/guide*
\$32.15

Ground Covers and Their Uses

An excellent film that suggests ground covers appropriate for specific areas or sites. Fifty ground covers are illustrated with photographs and their culture is described in detail.

F646 Filmstrip, 60 fr., w/guide.. \$9.95 S646 Slide set, 60 fr., w/guide....... \$15.95

Nursery/Landscape Plant Identification

On each frame, a color photograph and original line drawing depict habit and identification characteristics. Each plant is identified by scientific and common names. Sets marked Supp have no identifying names.

F664 Filmstrip, 116 fr	\$41.60
F664(Supp) Filmstrip, Practice	set for
F664, 116 fr	\$41.60
S664 Slide set, 116 fr	\$64.80
S664(Supp) Slide set, Practice	set for
S664, 116 fr	\$64.80

Mechanical Digging of Trees and Shrubs S641-1 Slide set, 74fr. \$18.50

Hand Digging of Trees and Shrubs S641-2 Slide set, 45fr......\$11.25

Proper Transplanting of Trees S641-3 Slide set, 55 fr., w/guide*

..... \$14.70

Care of Newly Planted Trees S641-4 Slide set, 45 fr., w/guide* \$12.20

Order by Phone (800) 345-6087

Reducing and Recycling Landscape Wastes

An overall review of reducing landscape wastes such as grass, shrubbery cuttings, leaves, tree limbs, and other materials accumulated as the result of the care of lawns, shrubbery, vines, and trees.

F663 Filmstrip, 61 fr., w/guide
\$24.35
S663 Slide set, 61 fr., w/guide
\$36.55

Transparencies

Landscape Construction Transparencies

A comprehensive series that shows construction details for fences, walls, earth features, driveways, sidewalks, patios, lighting, and beds. Clear illustrations explain surveying, protecting existing features during construction, and tree planting procedures.

Landsca	ape Construction Acc	essories
T617.1	74 fr	. \$49.45

Landscape Construction T617.2 86 fr. \$57.25

Landscape Planting and Bed Preparation

T617.3 30 fr......\$20.85

Landscape Construction
Transparency Series
MT617.1 3 Transparency sets

.....\$102.05

Photo CDs



Landscape Trees and Shrubs (Leaves and Flowers)

Contains photographs of leaves and flowers of the plant identification class (63 woody trees and shrubs) of the Illinois Horticulture Identification list. Introductory frames give common and scientific names, while the remaining frames are plant photographs without any identifying names or numbers. Includes a study guide listing major identification features. See page ii for IBM and Macintosh system requirements.



PCD115 w/guide \$47.00

Landscape Trees and Shrubs (Stems and Buds)

Contains photographs of stems and buds of the plant identification class (63 woody trees and shrubs) of the Illinois Horticulture Identification list. Introductory frames give common and scientific names, while the remaining frames are plant photographs without any identifying names or numbers. Includes a study guide listing major identification features. See page ii for IBM and Macintosh system requirements.



PCD116 w/guide \$47.00

Digital Slide Sets





Deciduous Shrubs

Illustrates and describes 17 deciduous shrubs. 54 photos show the leaves, stems, buds, flowers, and growth habits of the shrubs. Ability to print text and monochrome photos, hear the pronunciation of scientific names (requires sound capability on computer), and jump to glossary definitions of descriptive terms are additional features.



DS604 \$25.00

Deciduous Shrubs Practice Set

Repeats the photographs in DS604 without labels and is suitable for review and testing. Photographs are arranged into stems and leaves, stems and buds, fruit, flowers, and habit for the convenience of the instructor. Prints a key to the photographs. Includes suggestions for creating an on-screen quiz.



DS604qz.....\$25.00



Broadleaf Evergreens

Illustrates and describes 7 broadleaf evergreens. Twenty-two photos show the leaves, stems, buds, flowers, and growth habits of the shrubs. Ability to print text and monochrome photos, hear the pronunciation of scientific names (requires sound capability on computer), and jump to glossary definitions of descriptive terms are additional features.



DS607 \$20.00

Broadleaf Evergreens Practice Set Repeats the photographs in DS607 without labels and is suitable for review and testing. Photographs are arranged into categories such as stems and leaves, stems and buds, fruit, flowers, and habit for the convenience of the instructor. Prints a key to the photographs. Includes suggestions for creating an on-screen quiz. Has sound in the opening frames (requires sound capability on computer).



DS607qz \$15.00



Coniferous Plants

Illustrates and describes 12 coniferous plants on 3 disks. Twenty-eight photos show the leaves, stems, buds, reproductive structures, and growth habits of the plants. Ability to print text and monochrome photos, hear the pronunciation of scientific names (requires sound capability on computer), and jump to glossary definitions of descriptive terms are additional features.

DS608 \$20.00

Coniferous Plants Practice Set
Repeats the photographs in DS608
without labels and is suitable for
review and testing. Photographs are
arranged into categories such as
stems and leaves, stems and buds,
reproductive structures, and habit for
the convenience of the instructor.
Prints a key to the photographs.
Includes suggestions for creating an
on-screen quiz. Has sound in the
opening frames (requires sound
capability on computer).



DS608qz \$15.00



Perennials and Herbs

Illustrates 19 perennials and herbs. One or more color photos are provided for each plant, along with details about the plant and its use. Has sound in the opening frames (requires sound capability on computer). DS609 comes with documentation.



DS609 \$20.00

Perennials and Herbs Practice Set
Repeats the photographs in DS609
without labels and is suitable for
review and testing. Photographs are
grouped as in DS609 for the
convenience of the instructor.
Includes suggestions for creating an
on-screen quiz. This presentation
runs on Windows 3.X or 95. Has
sound in the opening frames (requires
sound capability on computer).
DS609qz comes with documentation.



DS609qz\$20.00

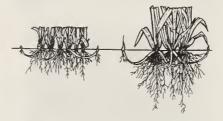


Turfgrass

Units



Turfgrass Selection and Establishment, 28p U5008a\$2.80



Turfgrass Maintenance in the Midwest, 32p

This unit describes important maintenance principles for lawns. Mowing, Fertilizing, Irrigating, Cultivating and Dethatching, Renovating, Reestablishing, and Other Practices are the major topics. Helpful cultivation, seeding, sodding, and fertilization schedules simplify planning maintenance operations.

U5009.....\$3.20

Filmstrips, Slide Sets, Study Guides, Cassette Tapes

 Steps to a Better Lawn

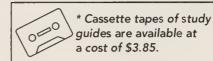
 F651a Filmstrip, 85 fr., w/guide*

 \$13.70

 S651a Slide set, 85 fr., w/guide*

 \$22.20





Lawn Establishment

Illustrates selecting the method of establishment, proper soil preparation, turfgrass selection, planting, and postplanting maintenance. Also includes suggested turfgrass cultivars and cultivar combinations for different uses.



Interactive Turf: Cool Season Turf Diseases and Their Management

This CD-ROM is designed for anyone associated with the turfgrass industry. It contains information on the prediction, diagnosis, and management of the 22 most common diseases or problems of cool-season turfgrasses. Includes descriptions, color photographs, study questions, a diagnostic chart, audio narrations, and a glossary.

CDR01 \$75.00

Vegetables

Units

Crop Breeding: Tomato, 24p
This publication describes the importance of the tomato crop, its breeding history, taxonomic relationships, crop characteristics, and breeding objectives. It includes a glossary and shows the steps in making controlled cross for the crop.

Caring for the Vegetable Garden, 16p U5032.....\$1.60

Growing and Harvesting Herbs, 40p U5033.....\$4.00

Miscellaneous

Units

Plant Genetics Series

Plant Genetics I discusses the primitive beginnings of plant selection, breeding, and hybridization to increase populations of plants with desired characteristics. Plant Genetics II takes a close look at the structures and basic types of reproduction, sexual and asexual, and the processes involved in pollination of plants. Plant Genetics III covers the Mendelian laws of inheritance, meiosis, and fertilization techniques. In activities, self- and cross-pollination and single-trait crosses are investigated.

Plant Genetics I: Crop Origins and
Plant Improvement, 20p
AU8001 \$2.0

Plant Genetics II: Plant Life Cycles and Breeding, 32p AU8002 \$3.20

Plant Genetics III: Plant Reproduction and Heredity, 36p AU8003 \$3.60

Horticultural Plant Names, 12p U5038.....\$ 1.20

Filmstrips, Slide Sets, Study Guides, Cassette Tapes

Insect Identification and Control Series

Common household and horticultural pests are illustrated. Each pest is identified by photograph; life cycle and habits are described (including damage); and chemical and nonchemical controls are listed.

Household Insects: Identification & Control

F654.1 Filmstrip, 80 fr., w/guide*
\$12.95
S654.1 Slide set, 80 fr., w/guide*
\$20.95

Turf Insects: Identification & Control F654.2 Filmstrip, 39 fr., w/guide* \$6.80

S654.2 Slide set, 39 fr., w/quide* \$10.70

Vegetable Insects: Identification & Control

F654.3 Filmstrip, 80 fr., w/guide*\$12.95 \$654.3 Slide set, 80 fr., w/guide*\$20.95

Shade Tree & Woody Shrub Insects: **Identification & Control**

F654.4 Filmstrip, 78 fr., w/guide* \$12.65 S654.4 Slide set, 78 fr., w/quide*\$20.45

Houseplant, Flower, & Fruit Insects: **Identification & Control**

F654.5 Filmstrip, 56 fr., w/guide*\$9.35 S654.5 Slide set, 56 fr., w/guide* \$14.95

Transparencies

Practical Horticulture, 51 fr.

Provides general illustrations and reference tables for horticulture. Use to supplement lectures and talks or for projection during student lab exercises. Major categories are Growth and Development, Landscaping, Soils and Nutrition, and Miscellaneous.

T630 \$34.50





Horticulture Digital Slide Sets

MDS601 Horticulture Digital Slide Sets is a collection of 14 different horticulture presentations with a total of 639 frames that would normally sell for over \$200 if purchased separately.

Includes DS601, DS601qz, DS602, DS602qz, DS604, DS604qz, DS607, DS607qz, DS608, DS608qz, DS609, DS609qz, DS640, and DS642. Presentations DS601 to DS609gz were developed to illustrate the plant identification list used in Illinois for the Illinois Association of Vocational Agriculture Teachers Horticulture Career Development Event. Each folder has a text file with information about how the presentation is organized and contains some guides to using the presentation. Note that the Bravo player program has a help section, which explains how to operate the Bravo multimedia player.

The advantages of digital slide sets on CD-ROM include 1) The presentations can run directly from the CD-ROM, eliminating the troublesome step of transferring from diskettes to a computer hard drive; 2) Because the presentations run from the CD-ROM, they won't occupy hard drive space; 3) There is no threat of overwriting the information on the CD-ROM; and 4) CD-ROMs are portable, so they can be reviewed at home in preparation for upcoming lessons in the classroom.

MDS601 \$99.00

Manual



Master Gardener Manual

This comprehensive, two-volume manual contains over 800 pages of information (including illustrations) on Botany, Soils, Plant Propagation, Pest Management, Disease Diagnosis, Fruits, Vegetables, Flowers, Woody Ornamentals, Landscaping, Grasses, Houseplants and more. Color plates of common horticultural disease and insect problems are provided. The manual comes in two 3-ring binders with sectional tabs. Extensive revision 2000.

A CD-ROM version of this training manual will be available in the first quarter of 2000. The CD-ROM consists of portable document format (PDF) files that can be read on Windows or Macintosh computers using Adobe Acrobat Reader software (a free download from www.adobe.com/prodindex/acrobat/ readstep.html). All the files on the CD-ROM are indexed and can be searched by keywords.

MG2 manual \$80.00 CDRMG2 CD-ROM \$80.00 SETMG2 manual + CD-ROM .. \$125.00



Horticulture Diseases and Pests Picture Sheets



V/ 00 04 El
X698.01 Flower Pests I \$.45
X698.05 Houseplant Pests I \$.45
X698.10 Interiorscape Pests I \$.45
X698.11 Interiorscape Pests II \$.45
X698.16 Ornamental Insects \$.45
X698.17 Tree & Shrub Pests I \$.45
X698.31 Turf Pests I \$.45
X698.46 Fruit Pests I \$.45
X698.61 Vegetable Pests I \$.45
X698.76 Household Pests I \$.45
X698.77 Household Pests II \$.45
X699.01 Flower & House Plant
Diseases I \$.45
X699.02 Flower & House Plant
Diseases II \$.45
X699.03 Flower & House Plant
Diseases III \$.45

X699.04 Flower & House Plant
Diseases IV \$.45
X699.05 Flower & House Plant
Diseases V \$.45
X699.06 Flower & House Plant
Diseases VI \$.45
X699.10 Interiorscape Diseases I
(Disorders) \$.45
X699.11 Interiorscape Diseases II
(Disorders) \$.45
X699.16 Tree Diseases I
X699.17 Tree Diseases II \$.45
X699.18 Tree Diseases III \$.45
X699.30 Woody Ornamental
Diseases I \$.45
X699.31 Turfgrass Diseases I \$.45
X699.35 Turfgrasses for the Midwest
\$.45
X699.36 Turfgrass Establishment
in the Midwest \$.45
X699.46 Apple Diseases I \$.45
X699.47 Apple Diseases II \$.45
X699.48 Cherry & Plum Diseases I
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X699.49 Cherry & Plum Diseases II
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X699.51 Peach Diseases I \$.45
X699.52 Peach Diseases II \$.45
X699.53 Bramble Fruit Diseases I\$.45
X699.54 Strawberry Diseases I \$.45
X699.55 Strawberry Diseases II . \$.45
X699.56 Blueberry Diseases I \$.45
X699.61 Vegetable Diseases I \$.45
X699.62 Vegetable Diseases II \$.45
X699.63 Vegetable Diseases III. \$.45

X699.64 Vegetable Diseases IV. \$.45

Diseases and Pests of Horticulture Plants

Spiral-bound booklets of photo identification sheets; each page has one side filled with 20 to 25 detailed color photos; the other side has concise descriptions. Simplifies identification of many horticultural plant diseases. 37 sheets which include: Flower & House Plant Diseases I-VI, Tree Diseases I-III, Woody Ornamental Diseases I, Turfgrass Diseases I, Apple Diseases I & II, Cherry & Plum Diseases I & II, Grape Diseases I, Peach Diseases I & II, Bramble Fruit Diseases I, Strawberry Diseases I & II, Blueberry Diseases I, Vegetable Diseases I-IV, Flower Pests I, Houseplant Pests I, Interiorscape Pests I, Interiorscape Pests II, Fruit Pests I, Ornamental Insects, Tree and Shrub Pests I, Turf Pests I, Vegetable Pests I, Interiorscape Diseases I (Disorders), and Interiorscape Diseases II (Disorders).

MX699.96a \$14.75

FFA, SOEP, Record Books

Units

Standards for Measures of Efficiency for 1999, 8p

This item, based on FBFM records from the previous year, provides standards for use in analyzing and evaluating student records. It is revised each year.

U2020.....\$.80



History of the Illinois FFA, 16p This unit covers the history of the Illinois FFA from the beginning to the 1990s.

U7001a \$1.60



R9800 Series of SAE Records - 1998

This SAE Record Book is designed for use in a 3-ring binder. All record book pages are 3-hole punched. The basic book consists of 12 white pages and a gold-colored cover. Each student with a Supervised Agriculture Experience Program needs the basic book. To this basic book, each student will need to add a special section for each Animal, Business and Crop Enterprise in that student's SAE. Certain extra pages are available in pads of 25 sheets for those students who need additional pages for their records. Also, an attractive 3-ring binder with gold-colored cover and spine inserts is available. A practice problem for student use was developed from two previous practice problems. A key to the problem is available.

Sections for Basic Book

R9802 \$ 1.25

Crop Enterprise, 14 green pages R9803\$ 1.25

Extra Pages, bundles of 25, 3-hole punched

Record of Experiences – Animal, p. 5AX, yellow R9804\$2.00

Receipts – Animal, p. 9AX, yellow R9805 \$2.00

Cash and Noncash Expenses – Animal, p. 11AX, yellow R9806 \$2.00

Training Agreement/Training Plan – Business, p. 3BX, blue R9807\$2.00

Record of Experiences – Business, p. 5BX, blue R9808\$2.00

Wage/Labor Summary - Business, p. 7BX, blue R9809 \$2.00

Receipts – Business, p. 9BX, blue R9810 \$2.00

Cash and Noncash Expenses – Business, p. 11BX, blue R9811\$2.00

Record of Experiences – Crop, p. 5CX, green

R9812 \$2.00

Receipts – Crop, p. 9CX, green

R9813 \$2.00

Cash and Noncash Expenses – Crop, p. 11CX, green R9814 \$2.00



Supplemental Materials

SAE Record Book for Agribusiness — 1991 Version (gold)

R300a.F \$2.00

Extra Pages

 Training Agreement/Training Plan,

 Pad/50

 R300a.T
 \$3.00

 Receipts, pack/20

 R300a.R
 \$1.50

 Expenses, pack/20

 R300a.E
 \$3.00

Production Record Books — 1991 Version (blue) Basic Book Sections

Livestock Enterprise (yellow pages)
R901.2 \$1.00

Crop Enterprise (green pages)
R901.3\$.50

Extra Pages

Feed Records for Livestock, pad/20 R901.4 \$1.50

Notes and Observations Sheets for Livestock, pad/20 R901.5\$1.50

Judging Dairy Cattle

28

J200 \$1.10

Notes and Observations Sheets for

Selection, Attributes, and Faults Crops, pad/20 V101 10:55 min. \$30.00 R901.6 \$1.50 Placing and Discussion of Commercial Chianina Heifers Judging, Identifying, and Scoring **Judging Materials** V102 13:32 min. \$30.00 **Dairy Products** Of the recent changes made to this Oral Reasons in Livestock Judging manual, the most important to Unit V103 12 min. \$30.00 examine are the sources of questions for the written exam, the expansion of Marking Animal Sciences Contest the Real vs. Artificial list of products, Judging Cards Used in Cards, 20p changes made on the cards, and Illinois State Career additions to the reference list. **Development Events** U1070.....\$2.00 J250c \$3.85 Specify type and color (B=blue, **Judging Manuals** G=green, P=pink, S=salmon, Crop Judging Y=yellow) J790\$3.85 **Judging Beef Cattle** Sold only in bundles of 50 J100a.....\$3.85 Agribusiness Management and **Judging Samples** Agricultural Mechanics—No judging Judging and Grading Poultry and cards used. Sample Grain Rings **CROPS** This manual for the Poultry CDE has (available August to December while J999.100B Regular Placing \$3.50 important information on judging quantities last) J999.100G Regular Placing \$3.50 chicken patties and a parts Z7002 \$30.00 J999.100P Regular Placing \$3.50 identification list. J999.100S Regular Placing \$3.50 Crop Seed Samples (34 crops in J999.100Y Regular Placing \$3.50 J120b \$3.85 storage box) J999.107B Crop Seed Identification.. Z7003 \$20.00\$ 3.50 J999.107G Crop Seed Identification. Soil Judging\$3.50 J999.107P Crop Seed Identification.. Land-Use Scorecards (Prod.-Ag) 100\$3.50 J999.107S Crop Seed Identification... J700 pkg. of 25 \$4.00\$3.50 J999.107Y Crop Seed Identification... Land-Use Scorecards (non-Aq. Use)\$3.50 J999.108B Weed Identification ... \$3.50 Judging Sheep J701 pkg. of 25 \$4.00 J999.108G Weed Identification ... \$3.50 J140a.....\$3.85 J999.108P Weed Identification ... \$3.50 J999.108S Weed Identification.... \$3.50 Special version of J701 for IL IAVAT Sections 16 and 17 J999.108Y Weed Identification ... \$3.50 J701.16 pkg of 25 \$4.00 DAIRY Tables for Soil Judging Scorecards J999.100B Regular Placing \$3.50 J999.100G Regular Placing \$3.50 J702 pkg. of 10 \$1.60 J999.100P Regular Placing \$3.50 Special version of J702 for IL IAVAT J999.100S Regular Placing \$3.50 J999.100Y Regular Placing \$3.50 for Sections 16 and 17 J999.101B Production Ring \$3.50 J702.16 pkg. of 10 \$1.60 J999.101G Production Ring...... \$3.50 **Judging Horses** J999.101P Production Ring \$3.50 **Videotapes** J150a.....\$3.85 J999.101S Production Ring \$3.50 J999.101Y Production Ring \$3.50 Livestock Judging Videotape Series **Judging Swine** J999.127B Pedigree Ring \$3.50 J160a \$3.85 J999.127G Pedigree Ring \$3.50 Visual Appraisal of Yearling Beef J999.127P Pedigree Ring \$3.50 Meat Judging and Grading J999.127S Pedigree Ring \$3.50 V100 11:49 min. \$30.00 J180f \$3.85 J999.127Y Pedigree Ring \$3.50

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Parliamentary Procedure

Filmstrip, Slide set

Introduction to Parliamentary Procedure This program explains why parliamentary procedures were developed and describes the classes of motions.

F1006	Filmstrip,	49	fr	\$18.15
S1006	Slide set,	49	fr	\$27.95

Transparencies, Study Guide

Parliamentary Procedure Transparencies

Classes and ranking of motions used in parliamentary procedure are explained in this set of transparencies.

T1006	14 fr	w/guide	 \$12.45
1 1000	17 11.,	W/ guide	 412.70

Other Parliamentary **Procedure Materials**

Parliamentary Procedure, 36p

U7004\$3.60
Beginning Steps in Parliamentary Procedure P271 \$ 1.00
The Teacher's Guide to Parliamentary Procedure P272 \$ 1.00
Test Questions for P272 Q272\$1.30
Teacher's Key for Q272 K272 \$1.30



Characteristics of Motions, 12p P273 \$ 1.00

Soil Erosion Hands-on Science Kit



\$145.00

AK-11

First in a series of soil conservation and water quality projects, this kit tackles the highpriority problem of soil erosion. Based around the Secret Agent Worms book, *The Disappearing* Earth, the kit includes a variety of exciting materials:

- A teacher's guide, which includes soil erosion experiments and spy activities
- Materials to run four soil erosion experiments and two "spy" activities
- A teacher's packet that includes 6 activity sheets, 2 posters, 30 bookworm bookmarks, and
 30 Secret Agent Worms stick-on badges
- A copy of The Disappearing Earth
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The Disappearing Earth features the exploits of two secret agent worms Napoleon Soil and Jane Blonde. Their mission is to find out why our soil is disappearing.

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